

REMARKS

The present application includes claims 1-20 and 22-25. Claim 21 has been withdrawn. Claims 1-20 and 22-25 have been rejected by the Examiner. By this response, claims 1, 6, 11 and 20 have been amended.

Claim 1 has been amended to recite that function commands are generated based on a system configuration file, and task instructions are provided based on a subsystem configuration file. Claim 6 has been amended to remove the extraneous word “system” and replace it with the intended word “said,” as in “said subsystem manager.” Claim 11 has been amended to recite that a function command is transmitted based on a configuration file, and the function command is relayed to a task operator based on the configuration file. Claim 20 has been amended to recite that control of a medical diagnostic imaging system is distributed among a plurality of hierarchical levels based on at least one configuration file. Additionally, in claim 21, system commands are transmitted from the top level to the plurality of secondary levels based on the at least one configuration file. Thus, the Applicant respectfully submits that the pending claims as amended recite patentable subject matter and should be allowed.

Claims 1-6, 11-13, 16-19 and 22-23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey et al. (U.S. Patent No. 6,175,934) in view of the GE article (From InSite to OnSite: Leveraging Technology for Rapid Service Growth).

35 U.S.C. 103(a) states:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

To render a claim obvious, there must be some suggestion or motivation to combine the references. MPEP § 706.02(j). Additionally, there must be a reasonable expectation of success. MPEP § 706.02(j). Finally, the combined references must teach or suggest all the claim limitations. MPEP § 706.02(j).

The law is well settled that “obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion or incentive to do so.” *ACS Hospital Systems, Inc. v. Montfiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929 (Fed. Cir. 1984). Additionally, the Examiner is not permitted to use an improper hindsight reconstruction of the claimed invention in rejecting the claims. Use of hindsight analysis has been specifically condemned by the Federal Circuit:

The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification ... Here, the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or “template” to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This Court had previously stated that “one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.”

In Re John Fritch, 972 F.2d 1260, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir. 1992). See also *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1135, 1143 n.5, 229 U.S.P.Q. 182, 187 n.5 (Fed. Cir. 1986); MPEP 2141. When a prior art reference must be modified to show a claimed invention, the prior art must suggest the modifications in order to make the claims obvious under 35 U.S.C. § 103. *ACS Hospital Systems*, 732 F.2d at 1577. The teaching or suggestion to make the claimed

combination and the reasonable expectation of success must both be found in the prior art and not based on the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991).

It is not permissible to pick and choose among the individual elements of assorted prior art references to re-create the claimed invention, but rather "some teaching or suggestion in the references to support their use in the particular claimed combination" is needed. *Symbol Technologies, Inc. v. Opticon, Inc.* 935 F.2d 1569, 1576, 19 U.S.P.Q.2d 1241 (Fed. Cir. 1991). That is, in order to combine two or more prior art references to make claims obvious under 35 U.S.C. § 103, the prior art references must suggest the combination of their teachings. *ACS Hospital Systems*, 732 F.2d at 1577. In *Ex parte Hiyamazi*, the Board of Patent Appeals and Interferences reversed a rejection based on a combination of references, stating, in part:

Under 35 USC § 103, where the Examiner has relied upon the teachings of several references, the test is whether or not the reference viewed individually and collectively would have suggested the claimed invention to the person possessing ordinary skill in the art. Note *In re Kaslow*, 707 F.2d 1366, 107 USPQ 1089 (Fed. Cir. 1983). It is to be noted, however, that citing references which merely indicate the isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed references would have been obvious. That is to say, there should be something in the prior art or a convincing line of reasoning in the answer suggesting the desirability of combining the claimed invention. Note *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986).

Ex parte Hiyamazi, 10 U.S.P.Q.2d 1393, 1394 (Bd. Pat. App. & Interf. 1988).

The law also is very clear that a finding of obviousness can only be premised on prior art references from analogous areas of art and not on art from nonanalogous areas. Specifically, the Federal Circuit has applied the following two-step test:

The determination that a reference is from a nonanalogous art is therefore twofold. First, we decide if the reference is within the

field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved.

In re Deminski, 796 F.2d 436 (Fed. Cir. 1986).

Turning now to the rejection of claims 1-6, 11-13, 16-19 and 22-23 over Hershey and the GE article, the Applicant respectfully submits that a combination of Hershey and the GE article does not teach or suggest all of the limitations recited in claims 1-6, 11-13, 16-19 and 22-23.

The GE article mentions remote diagnostics to access data available on customer equipment. See, e.g., page 1. However, the GE article does not discuss a system manager, a subsystem, a subsystem manager and at least one task operator, as recited in claim 1. Additionally, the GE article does not disclose the system manager generating function commands and the subsystem manager providing task instructions in response to the function commands, as recited in claim 1. Furthermore, the GE article does not teach or suggest the system manager generating, based on a system configuration file, function commands, and the subsystem manager providing, based on a subsystem configuration file, task instructions in response to the received function commands.

Hershey relates to a satellite-based system for remote monitoring test equipment. Abstract. Hershey allows specialized tests to be conducted on the equipment to aid in predictive maintenance. Abstract. Geo-synchronous based satellites enable a remote diagnostic unit, which is coupled to an apparatus under test, to communicate with a remote diagnostic station regardless of geographic location. Col. 1, ln. 66 – col. 2, ln. 22. However, Hershey does not discuss a system manager, a subsystem, a subsystem manager and at least one task operator, as recited in claim 1. Additionally, Hershey does not disclose the system manager generating function

commands and the subsystem manager providing task instructions in response to the function commands, as recited in claim 1. Furthermore, Hershey does not teach or suggest the system manager generating, based on a system configuration file, function commands, and the subsystem manager providing, based on a subsystem configuration file, task instructions in response to the received function commands.

Therefore, while one of ordinary skill would not combined the satellite system of Hershey with the medical equipment of the GE article, since both references do not teach or suggest the limitations of claim 1, any combinations of the two references would also fail to teach or to fairly suggest the limitations of independent claim 1 of the present application. Therefore, Hershey and the GE article also fail to teach or suggest the limitations of dependent claims 2-6.

Similarly, independent claim 11 recites transmitting, based on a configuration file, a function command from a system manager to a subsystem manager for a subsystem, and relaying, based on the configuration file, the function command from the subsystem manager for the subsystem to a task operator for the subsystem. As discussed above with respect to claim 1, neither Hershey nor the GE article is organized according to the system manager, subsystem manager and task operator structure recited in claim 11. Additionally, neither of the references teaches or suggests command generation and relay based on a configuration file, as recited in claim 11. Therefore, neither Hershey nor the GE article, taken alone or in combination, teaches or suggests the limitations of claims 11-13 and 16-19 of the present application.

With respect to claim 22, the GE article does not discuss states or desired states of a medical diagnostic imaging subsystem. Nor does the GE article discuss initiating transition to a desired state and monitoring and coordinating the transition of the subsystem in order to

synchronize the medical diagnostic imaging system at the desired state (i.e., an operational state of a state machine, such as boot, shutdown, power failure, and error handling, for example). Hershey also does not teach or suggest such a series of steps. Additionally, Hershey does not teach or suggest monitoring and coordinating the transition of the at least one medical diagnostic imaging subsystem to the desired state in order to synchronize the medical diagnostic imaging system at the desired state. Rather, Hershey directs a machine under test to execute a self diagnostic test and then provide data to a central diagnostic station. Col. 5, ln. 29 – col. 6, ln. 15.

Therefore, neither Hershey nor the GE article, taken alone or in combination, teaches or suggests the limitations of claims 22-23 of the present application.

Next, claims 7 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey in view of the GE article and further in view of Havekost et al. (U.S. Patent No. 6,871,299). As described above, neither Hershey nor the GE article teaches or suggests the limitations of independent claim 1, from which claims 7 and 8 depend. Additionally, neither Hershey nor the GE article discloses a task operator or data indicative of a level or a phase in a function at which a failure occurs, let alone a task operator generating data indicative of a level (claim 7) or a phase (claim 8) in a function at which the failure occurred. The disclosure of Havekost does nothing to cure these defects. Havekost has no disclosure of states including one or more levels and levels including one or more phases, for example.

Therefore, any combination of Hershey, Havekost, and the GE article fails to teach or suggest the limitations of claims 7-8 of the present application.

Claim 9, 10, 14 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey in view of the GE article and further in view of Turek et al. (U.S. Patent No. 6,460,070). As discussed above, neither Hershey nor the GE article, taken alone or in combination, teaches or suggests the limitations of claims 1 and 11, from which claims 9-10 and 14-15 depend. Neither Hershey nor the GE article also discloses the further limitations of claims 9-10 and 14-15. Turek relates to a distributed enterprise including computing resources organized into managed regions servicing one or more gateway machines servicing a plurality of endpoint machines. Abstract. In Turek, a selected software agent is deployed into the computer network to diagnose a fault in the environment. Abstract and col. 2, ll. 47-49. I the software agent identifies the cause of the fault, then the agent undertakes a corrective or other action. Col. 2, ll. 40-62. Turek fails to cure the deficiencies of Hershey and the GE article with respect to the limitations of independent claims 1 and 11 and their respective dependent claims 9-10 and 14-15.

Therefore, none of Hershey, Turek or the GE article, taken alone or in combination, teaches or suggests the limitations of claims 9, 10, 14 and 15 of the present application.

Claim 20 was rejected under 35 U.S.C. 103(a) as being unpatentable over Turek in view of the GE article. Claim 20 recites a method for locating errors in a medical diagnostic imaging system. Claim 20 recites distributing control of a medical diagnostic imaging system among a plurality of hierarchical levels based on at least one configuration file, wherein the plurality of hierarchical levels includes a top level and a plurality of secondary levels. Claim 20 further recites transmitting system commands from the top level to the plurality of secondary levels based on the at least one configuration file. Additionally, claim 20 recites flagging an error at at least one of the plurality of secondary levels. Claim 20 also recites receiving notification at the

top level from the plurality of secondary levels includes status of the plurality of secondary levels, including the error at the at least one of the plurality of secondary levels. While Turek diagnoses faults in a large, distributed computer network, Turek does not relate to a medical diagnostic imaging system, and Turek does not use at least one configuration file to distribute control and transmit system commands in a hierarchical environment. As discussed above, the GE article does not cure these defects.

Therefore, the Applicant respectfully submits that neither Turek nor the GE article, taken alone or in combination, teaches or suggests the limitations of claim 20.

Finally, claims 24 and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hershey in view of the GE article and further in view of Mori et al. (U.S. Patent No. 4,627,055). As discussed above, neither Hershey nor the GE article, taken alone or in combination, teaches or suggests the limitations of independent claim 22, from which claims 24 and 25 depend. Neither Hershey nor the GE article teaches or suggests synchronizing a plurality of medical diagnostic imaging subsystems at a desired state. Additionally, neither Hershey nor the GE article teaches or suggests generating an error signal with one of the plurality of medical diagnostic imaging subsystems does not transition to a desired state. Mori, which relates to a decentralized system wherein subsystems diagnose failure and conduct suitable fault time processing, does nothing to cure these defects. Abstract. Mori does not relate to a medical diagnostic imaging system or subsystem. Additionally, timing, but not states, are synchronized in Mori. Col. 2, ll. 43-66.

Therefore, the Applicant respectfully submits that none of Hershey, Mori or the GE article, taken alone or in combination, teaches or suggests the limitations of claims 24 and 25.

Additionally, the Hahn references (U.S. Patent No. 6,856,825) cited but not relied upon by the Examiner does not teach or suggest the limitations of claims 1-20 and 22-25 of the present application.

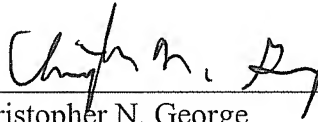
CONCLUSION

It is submitted that the present application is in condition for allowance and a Notice of Allowability is respectfully solicited. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GTC, Account No. 070845.

Dated: September 25, 2006

Respectfully submitted,



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